### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-004575

Address: 333 Burma Road **Date Inspected:** 31-Oct-2008

City: Oakland, CA 94607

**OSM Arrival Time:** 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1430 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Sun Wei / Sun Bo **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** Tower Components

## **Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector was present during the times noted above for observations relative to the work being performed.

Bay 3 – New Tower Shop

Visual Testing Before Repair

This QA Inspector performed an initial visual confirmation of the extent of rejectable indications contained in deck panel designated as DP166-001. This visual confirmation was performed in conjunction with ABF representative Kevin Chen and ZPMC representative Sun Wei.

### Bay 2 – New Tower Shop

This QA Inspector observed ZMPC welding personnel performing Flux Core Arc Welding (FCAW) of tower connection plate welds on ESD1-SA103. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure.

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint WSD1-SA225A/H-61B filler passes. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint WSD1-SA77A/E-45A filler passes. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

# WELDING INSPECTION REPORT

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### Bay 1 – New Tower Shop

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint NSD1-SA179D/E-9 filler passes. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint NSD1-SA179D/E-14 filler passes. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

## Tracking and Log Book

This QA Inspector reviewed the contract files and tracking logs for the Magnetic Particle Testing (MT), Ultrasonic Testing (UT), Welding Procedure Specifications (WPS), Procedure Qualification Records (PQR), and QC Inspector records for the deck panel repairs to date.

## **Summary of Conversations:**

No relevant conversations.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Josh Ishibashi, (858) 232-6799, who represents the Office of Structural Materials for your project.

Inspected By:	Clifford, William	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer